

Stainless Steel wire rod for drawing

Austenitics

Marques	Normes	Chemical composition											Rm max	Uses			
		C	Si	Mn	Ni	Cr	Mo	Cu	S	P	Co	Ti			N		
UGI® 204CU	EN 1.4597 UNS S20430	Min			7.00	1.25	16.00		2.50								Manganese and low nickel grade
		Max	0.07	1.00	8.00	2.25	17.50	0.50	3.50	0.015	0.040						
UGI® 244CU		Min			3.00	3.50	16.20		1.00								-
		Max	0.07	0.50	4.50	4.50	17.50	0.50	2.50	0.015	0.040						
UGI® 4301-1 UGI® 304-1	EN 1.4301 AISI 304 SUS 304	Min				8.00	18.00			0.015							Economical grade type 304 (low Ni)
		Max	0.07	1.00	1.50	9.00	19.00	0.50	0.75	0.030	0.040			0.10			
UGI® 4301-2 UGI® 304-2	EN 1.4301 AISI 304 SUS 304	Min				8.50	18.00			0.015							Less hardenable grade
		Max	0.07	1.00	1.50	9.50	19.00	0.50	0.75	0.030	0.040						
UGI® 304H	EN 1.4301 AISI 304H SUS 304	Min	0.04			8.50	18.00			0.015							Less hardenable grade
		Max	0.07	1.00	1.50	9.50	19.00	0.50	0.75	0.030	0.040						
UGI® 4301FG UGI® 304FG	EN 1.4301 AISI 304 SUS 304FB	Min			1.00	9.00	18.00			0.015							Excellent forgeability
		Max	0.05	1.00	2.00	10.00	19.00	0.50	0.75	0.030	0.040						
UGI® 4306	EN 1.4306 AISI 304L SUS 304L	Min			1.00	10.00	18.00			0.015							304L high nickel
		Max	0.03	0.70	1.50	11.00	19.00	0.30	0.60	0.030	0.040						
UGI® 4307-1 UGI® 304L-1	EN 1.4307 AISI 304L SUS 304L	Min				8.00	18.00			0.015							Basic grade, low nickel
		Max	0.03	1.00	1.50	9.00	19.00	0.50	0.75	0.030	0.040						
UGI® 4307-2 UGI® 304L-2	EN 1.4307 AISI 304L SUS 304L	Min				9.00	18.00			0.015							Less hardenable grade than UGI® 4307-1
		Max	0.03	1.00	1.50	10.00	19.00	0.50	0.75	0.030	0.040						
UGI® 4307FG UGI® 304LFG	EN 1.4307 AISI 304L SUS 304LFB	Min				9.00	18.00			0.015							Excellent forgeability
		Max	0.03	1.00	1.50	10.00	19.00	0.50	0.75	0.030	0.040						
UGI® 4541	EN 1.4541 SUS 321	Min				9.00	17.00			0.015			5 X C				Better corrosion resistance (especially intergranular) and better resistance to high temperature than UGI® 4307-2
		Max	0.06	1.00	2.00	10.00	18.00	0.50	0.50	0.030	0.040		0.60				
UGI® 4305 UGI® 303	EN 1.4305 AISI 303 SUS 303	Min			1.50	8.20	17.00			0.250							
		Max	0.07	0.75	2.00	9.20	18.00	0.50	0.75	0.350	0.040						
UGI® 4305HD UGI® 303HD	EN 1.4305 AISI 303 SUS 303	Min	0.04		1.50	8.50	17.00			0.150							Appropriate for severe deformations
		Max	0.07	0.75	2.00	9.50	18.00	0.50	0.75	0.250	0.040						
UGI® 4570 UGI® 303UX	EN 1.4570 SUS 303Cu	Min	0.04		1.50	8.00	17.00		1.50	0.250							650 Better for drilling than UGI® 4305
		Max	0.08	0.75	2.00	9.00	18.00	0.50	1.80	0.350	0.040						
UGI® 4567 UGI® 304CU	EN 1.4567 AISI 304CU SUS XM7	Min				8.50	17.00		3.00	0.015							Addition of copper - High cold deformability - Corrosion resistance similar to 4401
		Max	0.03	0.70	1.50	9.50	18.00	0.50	3.50	0.030	0.040						
UGI® 4401 UGI® 316	EN 1.4401 AISI 316 SUS 316	Min				10.00	16.50	2.00		0.015							Basic grade 316
		Max	0.07	1.00	2.00	11.00	17.50	2.50	0.70	0.030	0.040						
UGI® 4401FG UGI® 316FG	EN 1.4401 AISI 316 SUS 316 / 316FB	Min				10.50	16.50	2.00		0.015							Excellent forgeability
		Max	0.06	1.00	2.00	11.50	17.50	2.50	0.70	0.030	0.040						
UGI® 4404 UGI® 316L	EN 1.4404 AISI 316L	Min				10.00	16.50	2.00		0.015							Very good intergranular corrosion resistance
		Max	0.03	1.00	2.00	11.00	17.50	2.50	0.70	0.030	0.040						
UGI® 4404FG UGI® 316LFG	EN 1.4404 AISI 316L	Min				11.00	16.50	2.00		0.015							Better forgeability
		Max	0.03	1.00	2.00	12.00	17.50	2.50	0.70	0.030	0.040						
UGI® 4435 UGI® 316LMo	EN 1.4435 AISI 316L SUS 316L	Min				12.50	17.00	2.50		0.010							More Cr-Ni-Mo alloyed than UGI® 4404, increased corrosion resistance (pharmaceutical, medical, etc.)
		Max	0.03	1.00	2.00	13.50	18.00	3.00	0.50	0.025	0.040						
UGI® 4571	EN 1.4571 SUS 316Ti	Min				10.50	16.50	2.00		0.015			5 X C				Very good corrosion resistance (chemical industry)
		Max	0.03	1.00	2.00	11.50	17.50	2.50	0.50	0.030	0.040		0.60				
UGI® 4571FG	EN 1.4571 SUS 316Ti	Min				11.00	16.50	2.00		0.015			5 X C				610 Better forgeability than UGI® 4571
		Max	0.03	1.00	2.00	12.00	17.50	2.50	0.50	0.030	0.040		0.60				
UGI® 4828	EN 1.4828	Min	0.13	1.50		11.00	19.00										
		Max	0.17	2.50	2.00	12.00	20.00				0.030	0.040					
UGI® 4845 UGI® 310	EN 1.4845 AISI 310 SUS 310	Min	0.05			19.00	24.00										High oxidation resistance
		Max	0.10	0.75	2.00	20.00	26.00				0.015	0.040					
UGI® 4841 UGI® 314	EN 1.4841 AISI 314	Min		2.00		20.00	24.00										High oxidation resistance
		Max	0.08	2.50	2.00	21.00	26.00				0.015	0.040					
UGI® 4539 UGI® 904L	EN 1.4539 AISI 904L	Min				24.00	19.00	4.00	1.20								Very high acid resistance
		Max	0.02	0.70	2.00	25.00	20.00	5.00	2.00	0.010	0.030						



Stainless Steel wire rod for drawing

Ferritics

Brands	Standards	Chemical composition											Rm max	Uses		
		C	Si	Mn	Ni	Cr	Mo	Cu	S	P	Co	Al			Nb	
UGI® 4005Si UGIPERM® 12FM		Min		1.20			11.00			0.150					510	Ferritic with improved magnetic properties for electro-injectors
		Max	0.02	2.00	1.00	0.50	13.00	0.60		0.200	0.040					
UGI® 4016 UGI® 430	EN 1.4016 AISI 430 SUS 430	Min				16.00									560	Controlled sulphur grade 430
		Max	0.05	0.70	1.00	0.50	17.00	0.50	0.50	0.030	0.040					
UGI® 4016L UGI® 430L	EN 1.4016 AISI 430 SUS 430	Min				16.00										Low carbon grade 430
		Max	0.03	0.50	0.60	0.30	17.00	0.50	0.30	0.015	0.030					
UGI® 4105 UGI® 430F	EN 1.4105 AISI 430F SUS 430F	Min	0.05		0.30		16.00	0.20		0.250					560	Better machinability but lower corrosion resistance than UGI® 4016
		Max	0.08	0.70	0.80	0.50	17.00	0.50		0.350	0.040					
UGI® 4105Si	EN 1.4105	Min		1.00	0.30		17.00	0.20		0.250					560	Solenoid valve grade
		Max	0.03	1.50	0.80	0.50	18.00	0.50		0.350	0.040					
UGI® 4763 UGI® 446	AISI 446	Min				23.00									600	Glass seal, steel wool
		Max	0.06	0.70	1.00	0.50	24.00	0.50	0.50	0.030	0.030					
UGI® 4104	EN 1.4104	Min	0.10		1.00		15.50	0.20		0.250					600	Heat-treatable grade
		Max	0.15	0.70	1.50	0.50	17.50	0.50		0.350	0.040					
UGI® 4601 UGI® 409CB	EN 1.4601 ER 409Cb	Min		0.30	0.30	0.20	11.00							10 x C		Exhaust line hooks and parts
		Max	0.03	0.70	0.80	0.50	12.00	0.50	0.50	0.010	0.025			0.60		
UGI® 4114 UGI® 182	EN 1.4114 AISI XM 34	Min	0.05				17.50	1.50		0.150						Better corrosion resistance than UGI® 4104
		Max	0.08	1.00	0.50	0.50	18.50	2.50		0.250	0.040					
UGI® 4742	EN 1.4742	Min		0.70			17.00						0.70		550	-
		Max	0.05	1.40	1.00		18.00			0.015	0.040		1.20			
UGI® 4511	EN 1.4511	Min				16.00								12 X C and 7 (C + N)	470	For exhaust lines
		Max	0.02	0.50	0.60	0.30	17.00	0.50	0.20	0.015	0.030			0.30		

Duplex

Brands	Standards	Chemical composition											Rm max	Uses	
		C	Si	Mn	Ni	Cr	Mo	Cu	S	P	N				
UGI® 4062	EN 1.4362	Min			1.00	2.50	22.00						0.18	760	Low nickel duplex
		Max	0.03	1.00	2.00	3.00	24.00	0.60	0.60	0.010	0.035	0.25			
UGI® 4362	EN 1.4362	Min				3.50	22.00	0.10	0.10				0.10	760	
		Max	0.03	1.00	2.00	5.50	23.00	0.60	0.60	0.010	0.035	0.20			
UGI® 4462 UGI® 45N	EN 1.4462 UNS S31803	Min			1.00	5.00	22.00	2.50					0.12	830	High mechanical characteristics and excellent corrosion resistance Off-shore applications (pins, bolts, etc.) Propeller shafts, petrochemical industry (PRE = 33)
		Max	0.03	0.75	2.00	6.00	23.00	3.50		0.010	0.035	0.20			
UGI® 4462P	EN 1.4462 UNS S 32205	Min			1.00	5.00	22.00	3.00					0.12	830	High mechanical characteristics and excellent corrosion resistance Off-shore applications (pins, bolts, etc.) Propeller shafts, petrochemical industry (PRE = 35)
		Max	0.03	0.75	2.00	6.00	23.00	3.50		0.010	0.035	0.20			
UGI® 4507 UGI® 52N+	EN 1.4507 UNS S32550	Min				6.00	24.50	3.30	1.20				0.20		High mechanical characteristics and excellent corrosion resistance Off-shore applications (pins, bolts, etc.) Propeller shafts, petrochemical industry (PRE = 40)
		Max	0.03	0.70	1.50	7.00	26.00	4.00	2.00	0.010	0.035	0.25			
UGI® 4410	EN 1.4410 UNS S32750	Min				6.50	25.00	3.30					0.20		High mechanical characteristics and excellent corrosion resistance Off-shore applications (pins, bolts, etc.) Propeller shafts, petrochemical industry (PRE = 40)
		Max	0.03	0.70	1.50	7.50	26.00	4.00	0.50	0.010	0.035	0.30			



Stainless Steel wire rod for drawing

Martensitics

Brands	Standards		Chemical composition											Rm max anld	Uses				
			C	Si	Mn	Ni	Cr	Mo	Cu	S	P	Nb	V			N			
UGI® 4000 UGI® 410L	EN 1.4000 AISI 410S SUS 410	Min					12.50											560	Soft grade
		Max	0.03	0.50	1.00	0.60	13.50	0.50	0.50	0.015	0.030								
UGI® 4005 UGI® 416	EN 1.4005 AISI 416 SUS 416	Min	0.09		0.70		12.00			0.150								720	Basic grade for the European market
		Max	0.12	1.00	1.20	0.50	13.00	0.40	0.50	0.300	0.040								
UGI® 4005A UGI® 416A	EN 1.4005 AISI 416 SUS 416	Min	0.09		0.70		12.00			0.250								720	Better machinability than UGI® 4005 but lower corrosion resistance - Grade for the USA market
		Max	0.12	1.00	1.20	0.50	13.00	0.40	0.50	0.350	0.040								
UGI® 4006 UGI® 410	EN 1.4006 AISI 410 SUS 410	Min	0.09				12.00											680	Basic grade
		Max	0.12	0.70	1.00	0.50	13.00	0.50	0.50	0.030	0.030								
UGI® 4006H UGI® 410H	EN 1.4006 SUS 410	Min	0.12				13.00			0.015								685	High carbon 4006
		Max	0.15	0.70	1.00	0.60	13.50	0.50		0.030	0.030								
UGI® 4021 UGI® 420A	EN 1.4021 AISI 420 SUS 420J1	Min	0.18				12.00			0.015								720	Pump shafts, pistons, valves
		Max	0.22	0.70	1.00	0.75	13.00	0.50		0.030	0.030								
UGI® 4024	EN 1.4024 SUS 410	Min	0.12				13.00			0.015								685	High carbon 4006
		Max	0.15	0.70	1.00	0.60	13.50	0.50		0.030	0.030								
UGI® 4028 UGI® 420B	EN 1.4028 AISI 420 SUS 420J2	Min	0.28				12.00			0.015								750	Higher attainable mechanical properties than those of UGI® 4021
		Max	0.32	0.70	1.00	0.75	13.00	0.50		0.030	0.030								
UGI® 4029 UGI® 420F	EN 1.4029 AISI 420F SUS 420F	Min	0.26		0.70		12.00			0.150								750	Higher attainable mechanical properties than UGI® 4005A
		Max	0.31	1.00	1.30	0.50	13.00	0.40		0.250	0.040								
UGI® 4031 UGI® 420C	EN 1.4031 AISI 420	Min	0.36				12.50			0.015								750	Higher attainable hardness but lower corrosion resistance than UGI® 4028
		Max	0.42	0.70	1.00	0.75	13.50	0.50		0.030	0.030								
UGI® 4034 UGI® 420D	EN 1.4034 AISI 420	Min	0.43				12.50			0.015								760	Pins, needles, fuel-injection nozzles
		Max	0.47	0.70	1.00	0.75	13.50	0.50		0.030	0.040								
UGI® 4035	EN 1.4035	Min	0.43		0.50		13.00			0.180								760	European grade (4034+S)
		Max	0.48	1.00	1.00	0.50	14.00	0.20		0.260	0.040								
UGI® 4313	EN 1.4313	Min			0.50	3.50	12.00	0.50										760	European grade (4034+S)
		Max	0.05	0.60	1.00	4.00	13.00	0.70		0.015	0.030								
UGI® 4116N	EN 1.4116	Min	0.45				14.00	0.50						0.10	0.08			900	Replacement grade for 440C with better corrosion resistance
		Max	0.53	0.80	1.00	0.50	15.00	0.80		0.015	0.040			0.15	0.10				
UGI® 4057 UGI® 431	EN 1.4057 AISI 431 SUS 431	Min	0.17			1.50	15.50											900	Excellent forgeability - Oil industry - Aerospace industry - Mould manufacturing Good corrosion resistance
		Max	0.20	0.80	1.00	2.00	16.50	0.50		0.030	0.035								
UGI® 4057A UGI® 431S	EN 1.4057 AISI 431 SUS 431	Min	0.14			2.00	15.00			0.015								960	Better forgeability and machinability than UGI® 4057
		Max	0.17	0.80	1.00	2.50	17.00	0.30		0.030	0.030								
UGI® 4057FG UGI® 431FG	EN 1.4057 AISI 431 SUS 431	Min	0.17			2.00	15.50											900	Better forgeability than UGI® 4057
		Max	0.20	0.80	1.00	2.50	16.50	0.50		0.020	0.035								
UGI® 4122	EN 1.4122	Min	0.35				15.50	0.90										860	Better corrosion resistance than UGI® 4031
		Max	0.43	0.80	1.00	1.00	16.50	1.20		0.020	0.030								
UGI® 4418 UGI® 165M	EN 1.4418	Min			0.50	4.00	15.00	0.80		0.015								860	Excellent ability to withstand corrosion in aggressive environments, with high mechanical characteristics (recommended for cryogenics)
		Max	0.06	0.60	1.00	5.00	16.00	1.10		0.030	0.030								
UGI® 4542 UGI® 630	EN 1.4542 AISI 630 UNS S17400 SUS 630	Min				4.00	15.00			3.00	0.010			5 X C				1150	Structural hardening steel. Very high mechanical properties and excellent corrosion resistance. Pump shafts, propeller shafts. Parts for the aeronautical industry
		Max	0.06	0.60	1.00	5.00	16.50	0.50	4.00	0.025	0.030	0.45							
FLX4922	EN 1.4922	Min	0.18			0.40	11.00	0.80							0.25			800	
		Max	0.22	0.50	1.00	0.70	12.00	1.10	0.30	0.015	0.020				0.35				
FLX4923	EN 1.4923	Min	0.18			0.40	11.00	0.80							0.25			800	
		Max	0.22	0.50	1.00	0.70	12.00	1.10	0.30	0.015	0.020				0.35				



Stainless Steel wire rod for wire drawing - fine wire

Austenitics

Brands	Standards	Chemical composition										Rm maxi (MPa)	Uses		
		C	Si	Mn	Ni	Cr	Mo	Cu	S	P	N			Ti	
UGI® R4306 UGI® R304L	EN 1.4306 AISI 304L SUS 304L	Min			0.50	10.00	18.00							585	Basic grade for wire drawing ø between 0.1 and 0.8 mm
		Max	0.030	1.00	1.00	11.00	19.00	0.50	0.50	0.015	0.040	0.06			
UGI® R4541	EN 1.4541 SUS 321	Min				9.50	17.00						5 X C	570	ø between 0.1 and 0.8 mm
		Max	0.030	1.00	2.00	10.50	18.00	0.50	0.50	0.015	0.040	0.05	0.6		
UGI® R4404 UGI® R316L	EN 1.4404 AISI 316L	Min				11.00	16.50	2.00						600	Basic grade for wire drawing ø between 0.1 and 0.8 mm
		Max	0.030	1.00	2.00	12.00	17.50	2.50	0.50	0.015	0.040	0.08			
UGI® R4303 UGI® R305	EN 1.4303 SUS 305	Min				11.00	18.00								ø between 0.1 and 0.8 mm
		Max	0.025	0.75	1.50	12.00	19.00	0.50	0.70	0.015	0.035	0.06			
UGI® R4845 UGI® R310S	EN 1.4845 AISI 310S SUS 310S	Min		0.30	1.50	19.00	24.00							650	High corrosion and oxidation resistance ø between 0.1 and 0.8 mm
		Max	0.080	0.80	2.00	20.00	25.00	0.75	0.75	0.010	0.035	0.06			
UGI® R4841 UGI® R314	EN 1.4841 AISI 314	Min		2.00	1.50	20.00	24.00							650	Refractory ø between 0.1 and 0.8 mm
		Max	0.040	2.50	2.00	21.00	25.00	0.50	0.50	0.010	0.030	0.06			
UGI® R317L	EN 1.4438 AISI 317L SUS 317L	Min			1.50	14.50	18.50	3.50						600	ø between 0.1 and 0.8 mm
		Max	0.030	0.70	2.00	15.00	19.50	4.00	0.50	0.015	0.040	0.08			
UGIPURE® R4441	EN 1.4441	Min				14.00	17.50	2.50						650	ESR-R remelting surgical instruments ø < to 0.1 mm
		Max	0.030	1.00	2.00	15.00	18.50	3.00	0.50	0.015	0.025	0.10			



Ugitech SA France

Avenue Paul Girod
CS90100
73403 UGINE Cedex
Tel.: + 33 (0)4 79 89 30 30
Fax: + 33 (0)4 79 89 34 34
Mail: wiresales@ugitech.com
www.ugitech.com

Member of Swiss Steel Group